What is claimed is:

1. A system for authenticating a memory card, the system, comprising:

a capacity switching-type memory card host device including a
5   capacity switch notification module which notifies a memory card targeted
for exchanging information that the capacity switching-type memory card
host device handles a capacity switching-type memory card, and a capacity
switch authentication module which refers to a state of a large-capacity
expression register use flag of the targeted memory card and authenticates
10   whether the targeted memory card is the capacity switching-type memory
card;

a capacity switching-type memory card including a capacity
switching-type controller which flags the large-capacity expression register
use flag on receipt of notification of being the capacity switching-type
15   memory card host device, the large-capacity expression register use flag
indicating use of a large-capacity expression register which retains
information with a capacity exceeding a capacity which can be expressed by
an internal register; and

a bus which transmits and receives data between the capacity
20   switching-type memory card host device and the capacity switching-type
memory card.

2. A host device exchanging information with a memory card in a memory
card authentication system, the host device, comprising:
25   a capacity switch notification module which notifies a memory card
targeted for exchanging information that the host device handles a capacity

switching-type memory card; and

a capacity switch authentication module which refers to a state of a large-capacity expression register use flag of the targeted memory card and authenticates whether the targeted memory card is the capacity switching-type memory card.

3. The host device of claim 2, wherein the capacity switch notification module notifies the targeted memory card that the host device handles the capacity switching-type memory card, as part of an argument of an initialization command.

4. The host device of claim 3, wherein the argument of the initialization command includes 32 bits.

5. The host device of claim 2, wherein the capacity switch authentication module refers to the state of the large-capacity expression register use flag from part of an argument of a response to an internal register information retrieval command of the targeted memory card.

6. The host device of claim 5, wherein the argument of the response to the internal register information retrieval command includes any of 127 bits and 32 bits.

7. A memory card, comprising:

a capacity switching-type internal storage element including a plurality of storage areas, a master boot sector which retains file information

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on each of the plurality of storage areas, an internal register which retains capacity information on each of the plurality of storage areas, a large-capacity expression register which retains information with a capacity exceeding a capacity which can be expressed by the internal register, and a large-capacity expression register use flag which indicates use of the large-capacity expression register; and

a capacity switching-type controller which flags the large-capacity expression register use flag upon notification that a memory card host device targeted for exchanging information is a capacity switching-type memory card host device capable of using a plurality of capacity expressions while switching between the capacity expressions.

8. The memory card of claim 7, wherein the capacity switching-type controller receives notification of being the capacity switching-type memory card host device, as part of an argument of an initialization command.

9. The memory card of claim 8, wherein the argument of the initialization command includes 32 bits.

10. The memory card of claim 7, wherein the capacity switching-type controller notifies a state of the large-capacity expression register use flag to the capacity switching-type memory card host device as part of an argument of a response to an internal register information retrieval command.

11. The memory card of claim 10, wherein the argument of the response to the internal register information retrieval command includes any of 127 bits

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and 32 bits.

12. The memory card of claim 7, wherein the capacity switching-type controller comprises:

5   an interface connected to the capacity switching-type internal storage element through an address bus;

        a comparator which receives an access destination to the capacity switching-type internal storage element from the interface; and

        a selector which selects any of output data from the capacity
10   switching-type internal storage element and partition information which cannot be authenticated by a conventional memory card host device, based on information from the comparator and on a state of the large-capacity expression register use flag, and transmits any of the data and the information thus selected to the interface.

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13. The memory card of claim 7, wherein the memory card has dimensions of 24 × 32 × 2.1 mm and includes a copyright protection function compliant with the secure digital music initiative standard.

20   14. A method for setting a storage capacity in a host device exchanging information with a memory card, the method, comprising:

        initializing the memory card;

        obtaining information on an internal register of the memory card;

        judging whether the memory card can use a plurality of capacity
25   expressions while switching between the capacity expressions;

        authenticating a capacity expression of the internal register of the

memory card when the memory card is incapable of using the plurality of capacity expressions by switching between the capacity expressions; and

using a capacity expressed by the internal register.

5   15.   A method for setting a storage capacity in a host device exchanging information with a memory card, the method, comprising:

obtaining information on an internal register of the memory card;

judging whether the memory card can use a plurality of capacity

10   expressions while switching between the capacity expressions;

authenticating a capacity expression of a large-capacity expression register of the memory card when the memory card can use the plurality of capacity expressions by switching between the capacity expressions; and

using a capacity expressed by the large-capacity expression register.

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16.   The method of claim 15, further comprising:

setting a plurality of storage areas accessible as a single storage area.

17.   The method of claim 14 or 15, wherein the step of initializing includes

20   notifying the memory card that the host device handles a capacity switching-type memory card, which is capable of using the plurality of capacity expressions while switching between the capacity expressions, as part of an argument of an initialization command.

25   18.   The method of claim 17, wherein the argument of the initialization command includes 32 bits.

19. The method of claim 14 or 15, wherein the step of judging includes performing a judgment with reference to a state of a large-capacity expression register use flag of the memory card, the state being notified as
5   part of an argument of a response to an internal register information retrieval command.

20. The method of claim 19, wherein the argument of the response to the internal register information retrieval command includes any of 127 bits and
10   32 bits.

21. A storage capacity setting computer program product to be executed by a host device, the host device exchanging information with a memory card in a memory card authentication system, the computer program product,
15   comprising :

instructions for the host device to initialize the memory card;

instructions for the host device to obtain information on an internal register of the memory card;

instructions for the host device to judge whether the memory card
20   can use a plurality of capacity expressions while switching between the capacity expressions;

instructions for the host device to authenticate a capacity expression of the internal register of the memory card when the memory card is incapable of using the plurality of capacity expressions by switching between
25   the capacity expressions; and

instructions for the host device to use a capacity expressed by the

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internal register.

22.   A storage capacity setting computer program product to be executed by
a host device, the host device exchanging information with a memory card in
5   a memory card authentication system, the computer program product,
comprising procedures for:

instructions for the host device to initialize the memory card;

instructions for the host device to obtain information on an internal
register of the memory card;

10   instructions for the host device to judge whether the memory card
can use a plurality of capacity expressions while switching between the
capacity expressions;

instructions for the host device to authenticate a capacity expression
of a large-capacity expression register of the memory card when the memory
15   card can use the plurality of capacity expressions by switching between the
capacity expressions; and

instructions for the host device to use a capacity expressed by the
large-capacity expression register.